

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-79. (Canceled).

80. (Currently Amended) A method for classifying a patient having diffuse large B-cell lymphoma (DLBCL), the method comprising:

measuring expression of a plurality of genes in a tumor sample from the patient to produce measured expression values;

normalizing said measured expression values to produce normalized expression values;

correlating said normalized expression values to normalized reference expression values obtained for said plurality of genes from DLBCL patients grouped into classification groups; and

classifying the patient into one of said classification groups based upon weighed predictor Z in formula:

$$Z = (A \times LMO2) + (B \times BCL6) + (C \times FN1) + (D \times CCND2) + (E \times SCYA3) \\ + (F \times \text{BLC2 } \underline{BCL2})$$

wherein A is -0.03, B is -0.2, C is -0.2, D is 0.03, E is 0.2, and F is 0.6 and wherein LMO2, BCL6, FN1, CCND2, SCYA3 and BCL2 are log base 2 of normalized expression values for genes LMO2, BCL6, FN1, CCND2, SCYA3 and BCL2, respectively.

81. (Previously Presented) The method according to claim 80 wherein a Z value of less than -0.06 indicates high probability of survival, a Z value of from -0.06 to 0.09 indicates medium probability of survival and a Z value of greater than 0.09 indicates low probability of survival.

82. (Previously Presented) The method according to claim 80, further comprising:
predicting survival of the patient wherein said plurality of genes are predictive of probability of survival and wherein said classification groups comprise groups of said DLBCL patients having known overall probability of survival.

83. (Previously Presented) The method according to claim 82 wherein said known overall probability of survival comprises overall probability of survival after anthracycline-based chemotherapy.

84. (Previously Presented) The method according to claim 80 wherein said normalized expression values comprise ratios of measured expression values obtained from said plurality of genes to expression values of a housekeeping gene.

85. (Previously Presented) The method according to claim 84 wherein the housekeeping gene is *PGK1* or *GAPDH*.

86. (Previously Presented) The method according to claim 80 wherein said measuring expression of said plurality of genes in said tumor sample from the patient comprises performing real time RT-PCR on a portion of said tumor sample from the patient.

87. (Previously Presented) The method according to claim 80, further comprising:

determining whether said normalized expression values are similar to said normalized reference expression values obtained for said plurality of genes grouped into said classification groups selected from low, medium and high overall probability of survival after anthracycline-based chemotherapy.

88. (Currently Amended) The method according to claim 80 wherein said plurality of genes is selected from the group consisting ~~essentially~~ of LMO2, BCL6, FN1, CCND2, SCYA3 and BCL2.

89. (Previously Presented) The method according to claim 80 wherein said plurality of genes comprises LMO2, BCL6, FN1, CCND2, SCYA3 and BCL2.

90. (Currently Amended) The method according to Claim 80 wherein said measuring expression of a plurality of genes comprises:

hybridizing a plurality of primers to said plurality of genes, said plurality of primers being selected from a group consisting ~~essentially~~ of SEQ. ID. NO. 11, SEQ. ID. NO. 12, SEQ. ID. NO. 20, SEQ. ID. NO. 21, SEQ. ID. NO. 26, SEQ. ID. NO. 27, SEQ. ID. NO. 50, SEQ. ID. NO. 51, SEQ. ID. NO. 62, SEQ. ID. NO. 63, SEQ. ID. NO. 104, and SEQ. ID. NO. 105.

91-136. (Canceled)